

# **SOFTWARE EFFORT ESTIMATION IN SRI LANKA**

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The dissertation was submitted to in partial fulfillment of the requirement for the degree of  
Master of Business Administration.

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December 2007

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## **ABSTRACT**

There is a significant growth in the Sri Lankan market in terms of Information and Communication Technology (ICT). When considering the software project management, estimating software effort accurately is a major concern. Without reliable and trustworthy estimation, a proper project planning and control is impossible. Having a good estimation of the variables just at the beginning of a project makes the project manager confident about the future course of actions, since many of the decisions taken during the development depend on, or are influenced by initial estimations.

This research analyses software effort estimation process of several companies in different industries. It includes how software effort estimation tools and techniques are used in this process, identifying risks, issues and barriers when estimating process and identifying most significant factors in software effort estimation process.

The results suggest that software effort estimation process can be improved with the involvement of team members and team leads by adopting their ideas and suggestions. And referring historical data of similar projects facilitate estimator to identify the risks, issues and difficulties that could face during the project.

The dissertation concludes with a three most significant factors; (i) Requirement complexity, (ii) Knowledge and experience of human resource, and (iii) Scope, that should be treated as critical factors in software effort estimation process in order to achieve a good result at the end.